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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,017	03/19/2004	Koichi Nishimura	1785.1013	8200

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EXAMINER

EWALD, MARIA VERONICA

ART UNIT PAPER NUMBER

1722

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/804,017	Applicant(s) NISHIMURA ET AL.	
	Examiner Maria Veronica D. Ewald	Art Unit 1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/2/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-8 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

13. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Prior art does not teach that a double-base-framed molding machine is further comprised of a rear platen and a tie bar tying said stationary platen and said rear platen with each other and defining a longitudinal axis extending in a direction of movement of said movable platen, wherein said first mass includes said rear platen and said tie bar.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 2 and 5 – 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ziv-Av (U.S. 5,922,370). Ziv-Av teaches a molding machine, comprising: a stationary platen carrying a stationary mold (item 12 – figure 1; column 1, lines 10 – 15; column 3, lines 62 – 63); a movable platen (item 18 – figure 1; column 4, lines 4 – 5) arranged movably relative to said stationary platen and carrying a movable mold (column 4, lines 4 – 7); a first base frame supporting a first mass including said stationary platen (column

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4, lines 25 – 28); and a second base frame supporting a second mass different from said first mass, said second mass including said movable platen (column 4, lines 4 – 6); wherein said first base frame and said second base frame are independently shiftable relative to each other (column 4, lines 3 – 4, 33 – 40). In addition, the molding machine is further comprised of a platen support movably supporting said movable platen on said second base frame; wherein said second mass includes said platen support (item 20 – figure 1; column 4, lines 4 – 6). Furthermore, there is a drive section for applying a drive force to said movable platen so as to move said movable platen relative to said stationary platen (item 22 – figure 1); wherein said first mass includes said drive section (column 4, lines 7 – 9); wherein said first base frame and said second base frame are locally connected to each other (column 4, lines 20 – 30, 33 – 48).

With respect to claim 8, Ziv-Av teaches a molding machine comprising: a movable platen carrying a movable mold arranged movably relative to a stationary platen carrying a stationary mold (column 1, lines 10 – 15; column 3, lines 63 – 65; column 4, lines 4 – 6); and a first base frame supporting said stationary platen (column 4, lines 25 – 27); and a second base frame supporting said movable platen (column 4, lines 4 – 6).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ziv-Av in view of Ash, et al. (U.S. 6,626,659). Ziv-Av teaches the characteristics previously described but do not teach that there is a level adjustment means on either frame. Ziv-Av, however, does teach the use of localized feet deployed between a base element (item 32 – figure 2) and the lower surface to ensure that the machine frame assembly remains stable even during periods of slight clamping deformation (column 5, lines 7 – 10). These localized feet, however, are not adjustable.

In an injection molding method utilizing an injection unit in combination with a clamping assembly having a first (moveable) mold platen and a fixed mold platen, Ash, et al. teach the use of a frame (item 21 – figure 1) on which the clamping assembly is mounted. The frame includes a plurality of adjustable feet (item 111 – figure 5) to ensure that the mold base and mold cavity remain in parallel vertical position, during injection, such that the nozzle enters the sprue bushing in the mold base substantially horizontal (column 8, lines 13 – 17). Therefore, the adjustable feet ensure that the mold cavity is properly and horizontally aligned.

Thus, it would have been obvious at the time of the Applicant's invention to one of ordinary skill in the art to modify the clamping assembly of Ziv-Av, such that the localized feet are configured to be adjustable for the purpose of maintaining proper alignment during mold closing and opening, so that the mold cavities are horizontal with respect to each other.

Response to Arguments

16. Applicant's arguments, see page 4, paragraphs 1 and 2, filed March 2, 2006, with respect to the rejection(s) of claim(s) 1 – 3, 7 – 8 under 102(b) with regards to the reference of Hehl have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Ziv-Av (U.S. 5,922,370).

Applicant has emphasized that Hehl does not specifically teach the use of two separate base frames to support the moving platen and stationary platen. In addition, Applicant has argued that Hehl teaches that components 10a and 10b of the machine base frame are mutually supported in the region of the stationary mold carrier on the feet of the component 10b. In contrast, Applicant has asserted that his assembly is comprised of two independent base frames, on which the fixed mold carrying platen and the movable mold carrying platen are disposed – one platen on one frame and the other platen on the other frame, thus, the mass supported on each frame is different.

Examiner agrees with Applicant's arguments, and thus, has cited the reference of Ziv-Av. Ziv-Av teaches the use of a clamping frame or a first base frame and a positioning frame or second base frame. The fixed platen can be carried on both the clamping frame and positioning frame, which is shown in figures 1 – 7; however, Ziv-Av teaches that the fixed platen can be connected to *one or the other of the frames, and still achieve the same effect* (column 4, lines 25 – 30). In addition, the sliding or moving platen is connected to the positioning frame. Therefore, with the moving platen connected to the positioning frame and if the fixed platen is connected to the clamping

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frame, Ziv-Av, thus, teaches an assembly in which the stationary platen is supported on a first base frame and the moving platen is supported on a second base frame – the first base frame and second base frames supporting different masses. If, however, the fixed platen is connected to *both the positioning and clamping frames* (as shown in figures 1 – 7; column 4, lines 22 – 23), the first base frame, then only supports the fixed platen and the second base frame supports both the fixed and moving platen, the first and second masses are still different, since mass 1 = fixed platen only, mass 2 = fixed platen and the moving platen. Even if this is the case, the weight of the fixed platen is supported entirely on both frames, yet each frame supports different masses.

In addition, Ziv-Av teaches that the positioning and clamping frames are substantially mechanically independent of one another, such that the clamping forces from the clamping frame do not affect the positioning frame (column 4, lines 1 – 5, 45 – 47).

To reject dependent claim 3, the reference of Ziv-Av has been used in conjunction with the teaching of Ash, et al. The localized feet beneath the base of Ziv-Av ensure the stability of the assembly during clamping, but are not adjustable. Ash, et al., on the other hand, teach the use of adjustable feet to maintain proper alignment of the mold cavity. The localized feet of Ziv-Av can be configured to be adjustable according to the teaching of Ash, et al. for the purpose of maintaining proper, horizontal alignment during mold closing and opening.

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Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria Veronica D. Ewald whose telephone number is 571-272-8519. The examiner can normally be reached on M-F, 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MVE



ROBERT DAVIS
PRIMARY EXAMINER
GROUP 1300 / 200

3/14/00